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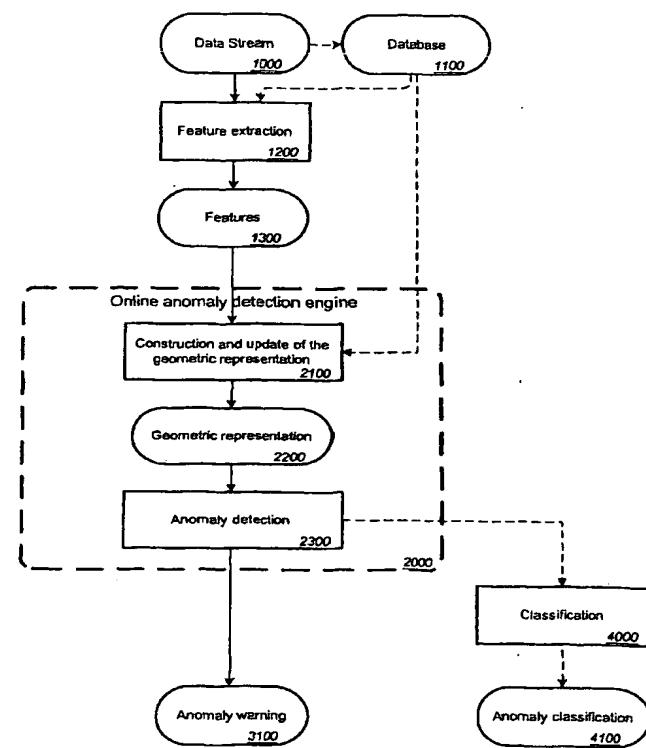
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(54) Title: METHOD AND APPARATUS FOR AUTOMATIC ONLINE DETECTION AND CLASSIFICATION OF ANOMALOUS OBJECTS IN A DATA STREAM



(57) Abstract: The invention is concerned with a method for automatic online detection and classification of anomalous objects in a data stream, especially comprising datasets and / or signals, characterized in that a) the detection of at least one incoming data stream (1000) containing normal and anomalous objects, b) automatic construction (2100) of a geometric representation of normality (2200) the incoming objects of the data stream (1000) at a time t1 subject to at least one predefined optimality condition, especially the construction of a hypersurface enclosing a finite number of normal objects, c) online adaptation of the geometric representation of normality (2200) in respect to received at least one received object at a time t2 > t1 , the adaptation being subject to at least one predefined optimality condition, d) online determination of a normality classification (2300) for received objects at t2 in respect to the geometric representation of normality (2200), e) automatic classification of normal objects and anomalous objects based on the generated normality classification (2300) and generating a data set describing the anomalous data for further processing, especially a visual representation.

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